2006 NATIONAL MONITORING CONFERENCE AGENDA

Sunday, May 7

8:00 - 1:00; 12:00 - 5:00	Field Trip: USGS Polaris Research Vessel Cruises - morning and afternoon trips (Meet at main entrance to Convention Center on 1st floor)
9:00 - 4:00	Field Trip: Monterey Aquarium & "Walk 'n Talk" with the Monterey Bay National Marine Sanctuary (Meet at main entrance to Convention Center on 1st floor)
10:00 - 3:00	Field Trip: Roaring Camp Railroad (Meet at main entrance to Convention Center on 1st floor)
12:00 - 5:00	Registration in Ballroom Concourse
12:00 - 7:00	Exhibitor Set-Up (Exhibit Hall 1)

Monday, May 8

7:00 - 8:00	Breakfast in Exhibit Hall 1, Registration in Ballroom Concourse							
	Meeting Room C2	**Meeting Room A4**	**Meeting Room C1**	**Meeting Room A3**	**Meeting Room C3**	**Meeting Room C4**		
Concurrent Session A **8:00 - 10:30**	WORKSHOP: ***Words and Water Quality: Effective Communication Through Better Publications*** Facilitators: Eleanor Ely, *The Volunteer Monitor*; Abby Markowitz, Tetra Tech, Inc.	WORKSHOP: ***Critical Elements of a Bioassessment Program for State & Tribal Monitoring*** Facilitators: Michael Barbour, Tetra Tech, Inc.; Chris Yoder, Midwest Biodiversity Institute	WORKSHOP: ***Data to Action: Empowering Citizens through the Acquisition and Understanding of Monitoring Data*** Facilitators: Candie Wilderman and Lauren Imgrund, ALLARM; Faith Zerbe, Delaware Riverkeeper	SHORT COURSE: ***Assessing Ground Water Vulnerability through Statistical and Mechanistic Methods*** Trainers: Sandy Eberts, Leon Kauffman, Bernard Nolan, Matthew Landon, and Jeffrey Starn, USGS; Stephen Kraemer and Mike Muse, USEPA; Rob Malone, USDA	WORKSHOP: ***Using U.S. Geological Survey Spatial Data to Analyze Water Quality*** Facilitators: Curtis Price, Joseph Kerski, and Sandy Williamson, USGS	WORKSHOP: ***Probability Survey Design for Aquatic Resources using R Statistical Software*** Facilitator: Tony Olsen, USEPA		
10:30 - 11:00	Break - Refreshments in Exhibit Hall 1							
11:00 - 12:30	**Opening Plenary and EJF Award Presentation (Ballrooms A1, 2, 7, 8)** Welcome to the 2006 National Monitoring Conference, David Tucker, Conference Chair Welcome to San José: Capital of Silicon Valley, John Stufflebean, Director, Environmental Services, City of San Jose Introduction to the 2006 Conference, Linda Green, Conference Chair The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries, Charles Spooner & Gail Mallard, NWQMC Co-Chairs **Keynote Speaker - Monitoring Networks: Connecting for Clean Water, Mr. Terry Tamminen, Special Assistant to the Governor of California** Presentation of the Elizabeth J. Fellows Award, Linda Green, Conference Chair Charge to Conference Participants, Jeffrey Schloss, Conference Chair							
12:30 - 1:30	Lunch in Exhibit Hall 1							

Monday, May 8

	Meeting Room A5	Meeting Room A6	Meeting Room A3	Meeting Room A4	Meeting Room C2	Meeting Room C4	Meeting Room C3	Meeting Room C1
Concurrent Session B **1:30 - 3:00**	***Measurement Performance I: Programwide Considerations*** Moderator: Karen Blocksom	***Perspectives on the Nation's Water Quality: Findings, Implications, & Future Directions I*** Moderator: Robin O'Malley	***Monitoring & Managing Ground Water Resources at Multiple Scales*** Moderator: David Wunsch	***Use of Ancillary Data and GIS Tools to Interpret Water Quality*** Moderator: Curtis Price	***Monitoring in the Shadow of the Golden Gate*** Moderator: Jessie Denver	***Pesticides in Midwestern Streams: Monitoring Strategies & Recent Results*** Moderator: Lyle Cowles	***Using & Developing WQ Indices*** Moderator: Curtis Cude	WORKSHOP: ***Getting Started in Volunteer Monitoring*** Facilitators: Linda Green, URI Watershed Watch; Danielle Donkersloot, NJ Watershed Watch Network
1:35 - 1:55	**Elements for a Successful Low-Level National Scale VOC Assessment**, David Bender, USGS	**Pesticides in the Nation's Streams and Ground Water, 1992-2001**, Robert Gilliom, USGS	**The Fall and Rise of an Aquifer—Stakeholders Unite to Conserve and Monitor the Sparta Aquifer in South Arkansas**, David Freiwald, USGS	**Characterizing the Landscape for Water-Quality Data Analysis: Methods and Implementation**, Curtis Price, USGS	**Sustaining a Regional Water Quality Monitoring Program: The Lessons from San Francisco Bay**, Michael Connor, San Francisco Estuary Institute	**Glyphosate concentrations in various hydrological compartments of a small watershed in east-central Indiana**, Nancy Baker, USGS	**Creative Outreach: Solving the Conundrum of Using Volunteer Water Quality Data as a Meaningful Source of Information**, Amanda Ross, Lower Colorado River Authority, Colorado River Watch Network	
1:55 - 2:15	**Lessons Learned in National Park Service Vital Signs Long Term Monitoring Program**, Roy Irwin, National Park Service	**Nutrients in the Nation's Streams and Groundwater, 1992-2001**, Neil Dubrovsky, USGS	**Proposed National Ground Water Monitoring Program**, Beverly Herzog, Illinois State Geological Survey	**Characterizing the Landscape for Water-Quality Assessment: Linking tabular county data on agricultural nutrient and pesticide applications to spatial land cover data to estimate nutrient and pesticide use in watersheds and ground water study areas**, Gail Thelin, USGS	**Monitoring metals in San Francisco Bay: Quantification of temporal variations from hours to decades**, Arthur Flegal, University of CA, Santa Cruz	**Monitoring Pesticides in Iowa's Waters**, Mary Skopec, IA Dept. of Natural Resources	**Anthropogenic Impacts to Fish Assemblages in Northern New Jersey Streams**, Leslie McGeorge, NJ Dept. of Environmental Protection	
2:15 - 2:35	**Meeting Programmatic Data Quality Objectives through a Standardized Verification and Validation System and Data Management**, Beverly van Buuren, San Jose State University Foundation, Moss Landing Marine Labs	**The National Coastal Assessment: Results, Lessons Learned and Future Directions**, Kevin Summers, USEPA	**The Need for Renewed Emphasis on State, Tribal and Federal Ground-Water Protection Programs**, Mike Wireman, USEPA Region 8	**The use of remotely-sensed and GIS-derived variables to characterize urbanization in the National Water-Quality Assessment program**, James Falcone, USGS	**Science, consensus and monitoring strategies: the art of revising a long-term benthic monitoring program**, Heather Peterson, CA Dept. of Water Resources	**Assessment of Nutrients and Selected Organic contaminants in Small Streams in the Midwestern United States**, 2004, James Stark, USGS	**Effects of hydrologic factors on ecological conditions of streams in the northeastern United States**, Jonathan Kennen, USGS	
2:35 - 2:55	**Challenges of Conducting Analytical Chemistry in Environmental Matrices or Why is my Blank not Blank?**, Meg Sedlak, San Francisco Estuary Institute	**Perspectives on the State of the Nation's Waters**, Robin O'Malley, The H. John Heinz III Center for Science, Economics and the Environment	**Developing a Ground Water Monitoring Strategy for Half the Cost - Literally**, David Wunsch, New Hampshire Geological Survey	**StreamStats: A Web-based application for estimating basin characteristics and streamflows**, Alan Rea, USGS	**Adapting an Ambient Monitoring Program to the Challenge of Managing Emerging Pollutants in the San Francisco Estuary**, Rainer Hoenicke, San Francisco Estuary Institute	**Trends in diazinon and other urban pesticides in stream samples from the northeastern United States**, 1993-2004, Patrick Phillips, USGS	**Assessment of Aquatic Biological Communities along a Gradient of Urbanization in the Willamette Valley Ecoregion and a Predictive Application to Unsampled Sites**, Ian Waite, USGS Oregon Water Science Center	
3:00 - 3:30	Break - Refreshments in Exhibit Hall 1							

Monday, May 8

	Meeting Room A5	Meeting Room A6	Meeting Room A3	Meeting Room A4	Meeting Room C2	Meeting Room C4	Meeting Room C3	Meeting Room C1
Concurrent Session C **3:30 - 5:00**	***Measurement Performance II: Field & Analytical Assessment*** Moderator: Tamim Younos	***Perspectives on the Nation's Water Quality: Findings, Implications, & Future Directions II*** Moderator: Donna Myers	***Monitoring Drinking Water & Sources of Supply*** Moderator: Gil Dichter	***Designing Watershed Assessments*** Moderator: LeAnne Astin	***Innovative Approaches for Developing Nutrient TMDLs*** Moderator: Jim Laine	***Making it Work: Designing Your Volunteer Monitoring Strategy*** Moderator: Bridget Hoover	***Seeing Your Way Through Turbidity Monitoring*** Moderator: Faith Zerbe	SHORT COURSE: ***Statistical Tools for Supporting the Development of a Multi Metric Index (MMI) for Macroinvertebrate Communities*** Trainer: John Stoddard, USEPA
3:35 - 3:55	**Uncertainty in Measured Streamflow and Water Quality Data for Small Watersheds**, Daren Harmel, USDA ARS	**A National Surveillance Study on Priority Pesticides in Canadian Aquatic Ecosystems**, Janine Murray, Environment Canada, National Water Research Institute	**Water quality monitoring of the Cambrian-Ordovician aquifer system in Iowa and Illinois**, Kimberlee Barnes, USGS	**Critical Evaluation of Waterbody Assessment Processes**, Lindsay Griffith, Brown and Caldwell	**The Northeast AVGWLF: A Watershed Scale Model to predict Sediment and Nutrient Transport**, Rebecca Weidman, New England Interstate Water Pollution Control Commission	**Designing Your Monitoring Plan: Linking Citizen Monitoring and Data Use**, Angie Becker Kudelka, Minnesota Waters	**Water Quality Impairment from Roadway Run-off: Characterizing Fine Particles**, Peter Green, University of California, Davis	
3:55 - 4:15	**Automated Validation and Grading of Aquatic Time Series Using a Probabilistic Parity Space Method**, Touraj Faramand, Aquatic Informatics Inc.	**Trends in Metals and Hydrophobic Organic Contaminants in Urban and Reference Lake Sediments Across the United States**, 1970 to 2001, Peter Van Metre, USGS	**Assessment of Shallow Ground-Water Quality in Agricultural and Urban Areas Within the Arid and Semi-arid Western United States**, Angela Paul, NV Water Science Center	**Whatever Happened to Pollution Surveys? The Case for Intensive River Segment Survey Designs**, Chris Yoder, Midwest Biodiversity Institute	**Modeling to Support the Development of Nutrient TMDLs in Baltimore Harbor**, Miao-Li Chang, MD Dept. of the Environment	**The Nuts and Bolts of a Volunteer Monitoring Day**, Diane Cross, South Yuba River Citizens League	**A Comparison of Ocular Turbidity Instruments for Shallow Waters**, Robert Carlson, Kent State University	
4:15 - 4:35	**Pre-mobilization Error Checks of Multi-parameter Field Instruments: One Way of Promoting Service-wide Consistency in a Water Quality Monitoring Program**, Peter Penoyer, National Park Service	**Volatile Organic Compounds in Ground Water and Drinking-Water Supply Wells**, John Zogorski, USGS	**Development of a Source Water Quality Monitoring Protocol for First Nations in Canada**, Rob Phillips, Environment Canada	**Combining Dynamic Assessments with Traditional Monitoring Approaches to Improve Understanding of NPS Pollution Impacts**, William Stringfellow, University of the Pacific	**Nutrient TMDLs for the Cahaba River Watershed**, Chris Johnson, AL Dept. of Environmental Management	**The Study Design - The Game Plan Behind Successful Monitoring Strategies and Effective Data Use**, Cheryl Snyder, PA Dept. of Environmental Protection	**Transparency tube as a surrogate for turbidity and suspend solids in rivers and reservoirs**, Nicole Reid, Michigan State University Extension	
4:35 - 4:55	**RPD Between Successive Measurement: A Simple But Neglected Tool for Assessing Monitoring Well Data Quality**, Bruce Castle, Erler & Kalinowski, Inc.	**Assessing the Ecological Conditions of the Great Rivers of the Central United States**, Brian Hill, USEPA	**Application of filtration-based luminescence method for rapid monitoring of microbial contamination in water**, Carmen Dumas, Ann Arbor Water Treatment Service Unit	**Introducing NHDPlus! – A Tool for Watershed Planning**, Richard Moore, USGS	**Supporting nutrient criteria development nationwide: Web application & Technical REQuest System (T-REQS)**, Jeroen Gerritsen, Tetra Tech, Inc.	**Monitoring - Just Do IT, Baywatchers: 14 years, QA data, Improved understanding, Being creative. The Coalition for Buzzards Bay Citizen's Water Quality Monitoring Program**, Tony Williams, The Coalition for Buzzards Bay	**Gaining Clarity on Transparency Measurements, Jeffrey Schloss**, University of New Hampshire Cooperative Extension	
5:00 - 7:00	Exhibit and Poster Reception (Exhibit Hall 1) This reception will kick off the networking with our long list of outstanding Exhibitors and Sponsors. This is also a prime opportunity to visit with our Poster Presenters.							

Tuesday, May 9

7:00 - 8:00	Breakfast in Exhibit Hall 1, Registration in Ballroom Concourse							
	Meeting Room A1	**Meeting Room A2**	**Meeting Room A3**	**Meeting Room A4**	**Meeting Room A5**	**Meeting Room A6**	**Meeting Room A7**	**Meeting Room C3**
Concurrent Session D **8:00 - 9:30**	***The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries*** Session Topic: Integrating Atmospheric Deposition	***Tiered Aquatic Life Uses: Conceptual Models & Development Strategies*** Moderator: Susan Jackson	***Making the Connections Between Surface and Ground Water*** Moderator: Gil Dichter	***Monitoring to Meet Many Objectives*** Moderator: Joan Warren	***Evaluating the Effects of Agriculture on Water Quality I*** Moderator: Paul Capel	***Making it Work: Starting & Sustaining Volunteer Monitoring Programs*** Moderator: Erick Burres	***Monitoring BMPs: Baselines & Strategies to Assess Restoration Efforts*** Moderator: Lester McKee	SHORT COURSE: ***Uses of Real-Time Data: Capabilities, Limitations, Applications, Costs, & Benefits*** Trainers: Andy Ziegler, Trudy Bennett, and Teresa Rasmussen, USGS
8:05 - 8:25	**Connecting atmospheric deposition to coastal water quality**, Hans Paerl, UNC Chapel Hill	**The Biological Condition Gradient and Tiered Aquatic Life Uses**, Susan Davies, State of Maine	**Making the Connections Between Surface Water and Ground Water**, Pixie Hamilton, USGS	**South Carolina Surface Water Monitoring: Different Designs for Different Objectives**, David Chestnut, SC Dept. of Health and Environmental Control	**Transport of Agricultural Chemicals: Mass Budget Approach**, Kathleen McCarthy, USGS	**What the Heron Sees**, Jean-Ann Moon, Marshall County Retired and Senior Volunteer Program	**Effects of Multi-scale Environmental Characteristics on Agricultural Stream Biota in the Midwestern USA**, Julie Berkman, USGS	
8:25 - 8:45	**Strategy for linking the atmospheric deposition network to the proposed national water quality monitoring network**, Mark Nilles, USGS	**Rule-based models for uniform assessments on the Biological Condition Gradient**, Jeroen Gerritsen, Tetra Tech, Inc.	**Importance of ground-water flow and travel time on nitrogen loading from an agricultural basin in Connecticut**, John Mullaney, USGS	**Key Considerations in Monitoring Design**, Lyle Cowles, USEPA Region 7	**Transport of Agricultural Chemicals: Atmosphere to Land Surface**, Michael Majewski, USGS	**Communication is Key to Sustaining Long-Term Volunteer Water Quality Monitoring Programs**, Jacob Apodaca, Lower Colorado River Authority	**Protocols for the Evaluating the Effects of Land-use Patterns and Runoff Management on Urban Streams**, Christine Rohrer, Colorado State University	
8:45 - 9:05	**Atmospheric mercury monitoring: existing framework and technical challenges**, TBN	**ADEM's Monitoring Strategy for Streams and Rivers: Development and Testing of a Human Disturbance Gradient in the Alabama, Coosa, and Tallapoosa River Basins**, Lisa Huff, AL Dept. of Environmental Management	**Predicting the Occurrence of Nutrients and Pesticides during Base Flow in Nontidal Headwater Streams of the Mid-Atlantic Coastal Plain**, Anne Neale, USEPA ORD NERL	**Water quality monitoring designs for multiple objectives and spatial scales: an evaluation based on detection of expected and actual impairment**, John Hunt, University of California, Davis	**Transport of Agricultural Chemicals: Tile drains to surface water**, Wesley Stone, USGS Water Resources Division	**Involving Volunteers Beyond Water Monitoring**, Gayla Stock, Houston-Galveston Area Council	**Assessing Rain Garden Effectiveness**, Brooke Asleson, University of Minnesota	
9:05 - 9:25	**Open discussion** facilitated by David Whitall, NOAA	**Key Issues and Underlying Concepts in Use Attainability Analyses for Aquatic Life Designated Uses**, Chris Yoder, Midwest Biodiversity Institute	**Hydrologic controls on nutrient and pesticide transport through a small agricultural watershed, Morgan Creek, Maryland, USA**, Michael Brayton, USGS	**Essentials of specification of information needs**, Jos G. Timmerman, Institute for Inland Water Management and Waste Water Treatment (RIZA)	**Pesticide and nutrient behavior in a karst watershed located in southeastern Minnesota**, Paul Wotzka, MN Dept. of Agriculture	**Capture, care and feeding of volunteers**, Dwight Holford, Upper Putah Creek Stewardship	**Open discussion and Q&A**	
9:30 - 10:30	Quick Break (refreshments in Exhibit Hall 1) followed by Poster & Exhibit viewing							

Tuesday, May 9

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session E **10:30–12:00**	***Strength in Numbers: Monitoring Councils at Work*** Moderator: Charlie Peters	***An Overview of the National Wadeable Streams Assessment*** Moderator: Susan Holdsworth	***Assessing Ground Water Vulnerability Through Mechanistic Methods I*** Moderator: Wayne Lapham	***Remote Sensing & GIS-Enhanced Monitoring & Analysis*** Moderator: Jim Harrison	***Evaluating the Effects of Agriculture on Water Quality II*** Moderator: Paul Capel	***Assessing Coastal Watersheds*** Moderator: Mike McDonald	***E. coli: Comparability of Methods & Rapid Detection*** Moderator: Eleanor Ely	WORKSHOP: ***Building Credibility: Quality Assurance & Quality Control for Volunteer Monitoring Programs*** Facilitators: Elizabeth Herron, URI Watershed Watch; Ingrid Harrald, Cook Inlet Keeper
10:35 - 10:55	**The Pacific Northwest Aquatic Monitoring Partnership: A Forum For Regional Coordination**, Jennifer Bayer, USGS	**National Stream and River Assessment Monitoring Design**, Anthony Olsen, USEPA NHEERL	**Proposed Tools and Approach for Ground-Water Vulnerability Assessment Using a Geographic Information System and Simulation Modeling**, Jack Barbash, USGS	**Using the National Hydrography Dataset Plus for drainage area delineation and site matching**, Kirsten Cassingham, USGS NC Water Science Center	**Transport of Agricultural Chemicals: Unsaturated Zone to Ground Water to Surface Water, San Joaquin Valley, California**, Joseph Domagalski, USGS	**Nitrogen and Phosphorus Loadings to the Neuse and Pamlico River Estuaries, North Carolina**, Jerad Bales, USGS	**Comparing E. coli Results Analyzed by Colilert® and Membrane Filtration Techniques**, Samuel Dinkins, Ohio River Valley Water Sanitation Commission	
10:55 - 11:15	**Interagency Monitoring Coordination: The Oregon Plan Monitoring Team**, Gregory Pettit, OR Dept. of Environmental Quality	**Defining Least-Impacted Reference Condition for the National Wadeable Streams Assessment**, Alan Herlihy, Oregon State University	**Basin-scale assessment of transport of water and agricultural chemicals through the unsaturated zone**, Richard Webb, USGS	**New NHD Tools for the Evaluation of Watershed Condition and Management Performance**, William Cooter, RTI International	**Linking Ground Water Age and Chemistry Data Along Flow Paths: Implications for Trends and Transformations of Nutrients and Pesticides**, Anthony Tesoriero, USGS	**Monitoring Wetlands in California**, Joshua Collins, San Francisco Estuary Institute	**Volunteer Monitoring of E. coli in Upper Midwest Streams: A Comparison of Methods and Preferences**, Kristine Stepenuck, University of WI-Extension, WI Dept. of Natural Resources	
11:15 - 11:35	**Development of the Florida Water Resource Monitoring Atlas**, Joe King, FL Dept. of Environmental Protection	**Process for developing a Macroinvertebrate Index of Biotic Integrity for the Wadeable Streams Assessment**, John Stoddard, USEPA	**Conceptual Framework for evaluating the impact of inactive wells on community water supplies**, Rick Johnson, Oregon Health & Science University	**GIS and Remote Sensing Applications In The Hydropolitics of Sub-Saharan Africa: The Case of Multinational Management of River Niger Basin of West Africa**, Edmund Merem, Jackson State University	**Transport of Agricultural Chemicals: Estimating Lag Times in Different Hydrologic Environments**, David Wolock, USGS	**Assessing the Health of National Park Service Southeast Coastal Waters Using the United States Environmental Protection Agency's National Coastal Assessment Protocols**, Joe DeVivo, National Park Service	**Development of Rapid QPCR Approaches for Measurement of E. coli and Enterococcus in Environmental Waters: The Future for Routine Monitoring?**, Rachel Noble, UNC Chapel Hill	
11:35 - 11:55	**Sustaining Long Term Regional Coordinated Monitoring Programs**, Todd Running, Houston-Galveston Area Council	**National Assessment of the Condition of Wadeable Streams in the Conterminous U.S.**, Steven Paulsen, USEPA	**Comparison of intrinsic susceptibility of public-supply wells to contamination among selected regional aquifer systems**, Leon Kauffman, USGS	**Incorporating remote sensing into an ambient monitoring strategy**, Mary Anne Nelson, ID Dept. of Environmental Quality	**Effective Policy Based on Sparse Data: TMDLs in the San Joaquin River Basin, California**, Leslie Grober, CA Regional Water Quality Control Board, Central Valley Region	**NOAA's National Estuarine Research Reserve's System Wide-Monitoring Program: Over 10 years of developing capabilities, applications, and expansions**, Susan White, NOAA National Estuarine Research Reserve	**IMS/ATP rapid method for the determination of E. coli concentrations in recreational waters**, Rebecca Bushon, USGS	
12:00 - 1:30	Lunch in Exhibit Hall 1							

Tuesday, May 9

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session F **1:30–3:00**	***The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries*** Session Topic: **Estuaries—Water Quality Monitoring in San Francisco Bay**	***Evaluating the Effects of Urbanization on Water Quality I*** Moderator: Ian Waite	***Assessing Ground Water Vulnerability Through Mechanistic Methods II*** Moderator: Wayne Lapham	***Real-Time Monitoring I: Applications & Program Case Studies*** Moderator: Tamim Younos	***State Experiences in Probabilistic Monitoring*** Moderator: Art Garceau	***Assuring Credible Volunteer Data*** Moderator: Jim Harrington	***Stormwater Monitoring: When It Rains It Pours*** Moderator: Dan Radulescu	WORKSHOP: ***Bioassessment Method Performance and Comparability, Part 1*** Facilitators: Laura Gabanski, USEPA; Jerry Diamond, Tetra Tech, Inc.
1:35 - 1:55	**Estuaries component of the Network**, Jawed Hameedi, NOAA	**Effects of Urbanization on Stream Ecosystems: Overview and Study Design of the U.S. Geological Survey's Urban Stream Studies**, Cathy Tate, USGS	**Application of Ground Water Dating Techniques for Evaluating the Susceptibility of Aquifers and Public-Supply Wells to Contamination**, Sandra Eberts, USGS	**Integrating a Continuous Water Quality Monitoring Network into Texas' Surface Water Quality Monitoring Program**, Jill Csekitz, TX Commission on Environmental Quality	**Pennsylvania's Application of Probability-Based Sampling**, Tony Shaw, PA Dept. of Environmental Protection	**QA/QC and QAPP: How to get professional quality data from a volunteer program**, Ingrid Harrald, Cook Inlet Keeper	**First Flush Volunteers Do it in the Dark**, Bridget Hoover, Monterey Bay National Marine Sanctuary	
1:55 - 2:15	**Lessons from three decades of monitoring in San Francisco Bay**, James Cloern, USGS	**Ecological responses of streams to urbanization: A review of results from the U.S. Geological Survey's urban streams studies**, Thomas Cuffney, USGS	**Evaluating uncertainty in areas contributing recharge to wells for water-quality network design**, Jeffrey Starn, USGS	**Continuous in-stream monitoring to measure and estimate water-quality concentrations, densities, and loads**, Andrew Ziegler, USGS	**Probabilistic Monitoring in Virginia: Experiences from the First Five Years**, Lawrence Willis, VA Dept. of Environmental Quality	**What is Representativeness, and Why are We Confused?**, Revital Katznelson, CA State Water Resources Control Board	**Monitoring of priority toxic pollutants in Highway Stormwater Runoff**, Peter Green, University of California, Davis	
2:15 - 2:35	**San Francisco Bay Regional Monitoring Program**, Jay Davis, San Francisco Estuary Institute	**Identifying the changes to stream condition caused by urbanization, and how modeling the responses can be used to improve ecological risk characterizations**, James Coles, USGS	**Use of Multiple Tracers and Geochemical Modeling to Assess Vulnerability of a Public Supply Well in the Karstic Upper Floridan Aquifer**, Brian Katz, USGS	**A Real-Time Water Quality Monitoring Network for Investigating the Strengths and Weaknesses of Existing Monitoring Techniques**, David Stevens, Utah State University	**Idaho's experience with random design using NHD: intermittent streams and other considerations**, Mary Anne Nelson, ID Dept. of Environmental Quality	**Evaluation of the New York City Watershed Hudson Basin River Watch Volunteer Monitoring Pilot Project**, Heather Clark Dantzker, The Community Science Institute, Inc., Cornell University	**Monitoring and Analytical Issues For BMP Performance Evaluation**, Hong Lin, CDS Technologies	
2:35 - 2:55	**Open discussion** facilitated by TBN	**Modeling Urban Landscape Patterns and their Effects on Aquatic Ecosystems**, Marina Alberti, University of Washington	**Depth-Dependent Sampling to Determine Source Areas and Short-Circuit Pathways for Contaminants to Reach Public Supply Wells, High Plains Aquifer, York, Nebraska**, Matthew Landon, USGS	**Monitoring Surface-Water-Quality in the Tongue River Watershed of Montana and Wyoming**, Stacy Kinsey, USGS	**Utility Of Probability-Based Survey Design for Tracking Fish Species of Interest**, Matt Combes, MO Dept. of Conservation	**Experiences in monitoring**, Eric Russell, Surfrider Foundation	**Evaluation of water quality monitoring data at the local level, a reality check**, Jeff Hieronymus, Charlotte Storm Water Services	
3:00 - 3:30	Break - Refreshments in Exhibit Hall 1							

Tuesday, May 9

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session G **3:30–5:00**	***Monitoring for the Prevention & Cleanup of Toxics*** Moderator: Ed Santoro	***Evaluating the Effects of Urbanization on Water Quality II*** Moderator: Cathy Tate	***Assessing Ground Water Vulnerability through Mechanistic Methods III*** Moderator: Ryan Dupont	***Harnessing the Beast: Managing Complex Data Sets*** Moderator: Ellen McCarron	**Monitoring for Trends** Moderator: Tony Olsen	**States & Volunteers: Partnerships that Work** Moderator: Alice Mayio	***Monitoring Algae: Tracking Trends, Toxins, & Food Web Dynamics*** Moderator: Fred Leslie	WORKSHOP: ***Bioassessment Method Performance and Comparability, Part 2*** Facilitators: Laura Gabanski, USEPA; Jerry Diamond, Tetra Tech, Inc.
3:35 - 3:55	**Monitoring mercury in biosentinel fish in San Francisco Bay**, Ben Greenfield, San Francisco Estuary Institute	**You're standing on it! Parking lot sealcoat and urban PAHs**, Barbara Mahler, USGS	**Groundwater Age as a Predictive Tool for Water Quality Monitoring**, Jean Moran, Lawrence Livermore National Laboratory	**Arkansas Monitoring Data Assessment Program (AMDAP) Using the Segment Evaluation Spreadsheet (SEGEVAL.XLS)**, Jessica Franks, USEPA Region 6	**The Regional Kendall Test for Trend**, Dennis Helsel, USGS	**The Vermont Lay Monitoring Program: Afloat For 26 Years!**, Amy Picotte, VT Agency of Natural Resources	**Spatial and temporal trends of algal biomass in small and large streams in Indiana, 2001-04**, Jeffrey Frey, USGS	
3:55 - 4:15	**Recovery and Monitoring Challenges with Water Quality Issues in New Orleans during Hurricane Katrina Recovery Operations**, William Roper, George Mason University	**City of Austin biological studies on the toxicity and effects of coal tar sealants on stream communities**, Mateo Scoggins, City of Austin	**Simulation of Short Circuit Flow Paths and Transient Conditions to Understand Vulnerability of Public Supply Wells to Contamination in the High Plains Aquifer, York, Nebraska**, Brian Clark, USGS	**Managing Monitoring Data from Many Sources: A New Hampshire Experience**, Deb Soule, NH Dept. of Environmental Services	**Water Quality Trends Along the Central Coast of California**, Marc Los Huertos, University of CA, Santa Cruz	**Using Citizen Monitoring Bioassessment and Water Quality Data to Obtain Impaired Watershed Status**, Joanne Hild, Friends of Deer Creek	**Influences of Stream Size in Determining Nutrient Criteria for Streams in the Eastern Corn Belt Plains Ecoregion**, Brian Caskey, USGS	
4:15 - 4:35	**The Regional Bypass WorkGroup—A Successful Application of Water Quality Prediction and Interagency Communication**, Charles Dujardin, HydroQual, Inc.	**Assessing the Effects of Urban Land Use on Stream Ecosystems: Integrating Chemistry, Toxicity Test, and CYP1A1 Gene Activation Data from Extracts of Semipermeable Membrane Devices**, Wade Bryant, USGS	**GAMA Special Studies on Nitrate in California Groundwater**, Bradley Esser, Lawrence Livermore National Laboratory	**Expanding Water Quality Assessments beyond the Realm of 'Impairments' and into a Tool Useful to Watershed Managers at the Local Level**, Ken Edwardson, State of New Hampshire	**Lessons Learned from Monitoring Compliance with a Phosphorus Standard in the Florida Everglades and Assessing the Linkage between Phosphorus Control and Marsh Water Quality**, Garth Redfield, South FL Water Management District	**The Oregon DEQ Volunteer Monitoring Program: Managing and Applying Data Generated Within a Grassroots Framework**, Steve Hanson, OR Dept. of Environmental Quality	**Algal pigments in benthic organisms and fish: development of biomarkers to trace food-web relationships**, Katherine Alben, NY State Dept. of Health	
4:35 - 4:55	**Combining prediction and monitoring for reduction of toxics: the Lake Michigan Mass Balance Study**, Glenn Warren, USEPA	**Pesticides in urban settings—Use of a Pesticide Toxicity Index to evaluate potential toxicity of stream water samples to macroinvertebrates**, Karen Riva-Murray, USGS	**Understanding agriculture-related trends in ground-water quality in the Western Lake Michigan Drainages, Wisconsin**, David Saad, USGS	**Vital Signs Water Quality Data Management in the National Park Service**, Dean Tucker, National Park Service	**Wisconsin's Surface Water Quality Monitoring Program**, Kenneth Schreiber, WI Dept. of Natural Resources	**New Jersey's Answer to Multiple Volunteer Data Sources**, Danielle Donkersloot, NJ Dept. of Environmental Protection	**Screening for Algal Toxins in Volunteer-Monitored Lakes**, Gene Williams, Snohomish County Public Works Dept.	

Tuesday, May 9

5:15 - ?	**Special Session on National Ground Water Monitoring (Meeting Room A1)** The purpose of this brainstorming session is to discuss the formation of a work group to help develop a consistent, nationwide monitoring and assessment program leading to an accurate estimation of ground water stored volume, availability, and sustainability. We will focus on defining the need for coordinated national ground water monitoring and developing recommendations for the planning and initial implementation of such monitoring. See strawman document at http://water.usgs.gov/wicp/acwi/monitoring/workgroups/wci/
5:15 - 6:30	**Volunteer Monitoring Coordinators Meeting (Meeting Room C1)** Discussion leaders: Linda Green, USDA-CSREES National Facilitation of Volunteer Monitoring and Alice Mayio, U.S. EPA This informal meeting is to encourage discussion and networking among volunteer monitoring coordinators. What's working in the world of volunteer monitoring, what needs more work, and where are we headed? Share some examples of your program successes, challenges, needs and desires!
6:30 - ?	**Gathering of Volunteer Monitoring Coordinators -- location TBA**
7:00 - 9:00	**Panel Discussion: Effects of Urbanization on Streams (Meeting Room A8)** Facilitator: Cathy Tate, USGS National Water-Quality Assessment Program This panel discussion will build upon earlier technical sessions on "Evaluating the Effects of Urbanization on Water Quality I & II" and will include 5 to 6 panelists who will provide perspectives on urban water-quality studies that represent the diverse interests of conference attendees. A brief introductory discussion by panel members will be followed by a general Q&A period. We will focus on the following questions: 1) Urban designs...what's worked, what hasn't?; 2) What types of data are being collected, what data are most useful in assessing the effects of urbanization on stream quality?; 3) Which data or information are most useful to planners, regulators, and watershed groups, and how is data from urban water quality studies being used by stakeholders?

Wednesday, May 10

7:00 - 8:00	Breakfast in Exhibit Hall 1, Registration in Ballroom Concourse							
	Meeting Room A1	**Meeting Room A2**	**Meeting Room A3**	**Meeting Room A4**	**Meeting Room A5**	**Meeting Room A6**	**Meeting Room A7**	**Meeting Room C3**
Concurrent Session H **8:00–9:30**	***The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries*** Session Topic: Large Rivers Monitoring Network	***Improving Data Management and Exchange*** Moderator: Rob Kent	***Cooperative Regional Monitoring in California*** Moderator: Ken Schiff	***Perspectives on the Nation's Water Quality: Findings, Implications, & Future Directions III*** Moderator: Ellen Tarquinio	***Effects of Urbanization on Water Quality: Case Studies*** Moderator: James Moring	***Making it Work: Effectively Training Volunteer Monitors*** Moderator: Paula Zevin	***Bioassessment Method Comparability & Performance*** Moderators: Jerry Diamond, Laura Gabanski	WORKSHOP: ***Statistical Analysis of Probability Survey Data Using R Statistical Software, Part 1*** Facilitator: Tony Olsen, USEPA
8:05 - 8:25	**Rivers Component of the Monitoring Network**, Jared Bales, USGS	**Water Quality Data Elements (WQDE): Enhancing comparability of monitoring information**, LeAnne Astin, Interstate Commission on the Potomac River Basin	**Inventory of Ocean Monitoring in the Southern California Bight**, Stephen Weisburg, Southern California Coastal Water Research Project	**Water quality monitoring and assessment of global change**, Richard Robarts, UNEP GEMS/Water Programme	**Comparing flow variability in urban streams across environmental settings**, Elise Giddings, USGS NC Water Science Center	**Georgia Adopt A Stream Coastal Region Training Center at Savannah State University**, Joseph Richardson, Savannah State University	**Comparable Biological Assessments From Different Methods and Analyses**, David Herbst, University of CA	
8:25 - 8:45	**Upper Mississippi River monitoring**, Mary Skopec, IA Dept. of Natural Resources	**Water Quality Exchange WQX: EPA's new look at Water Quality Data Management**, Kristen Gunthardt, USEPA Office of Water	**Southern California Bight Regional Marine Monitoring Program**, Kenneth Schiff, Southern California Coastal Water Research Project	**Evaluating the Potential Human-Health Relevance of Volatile Organic Compounds in Samples from Domestic and Public Wells in the United States**, Patricia Toccalino, USGS	**A tale of two streams: Chemical and physical characteristics of secondary tributaries in an arid urban watershed and potential impacts on a main stem river**, Philip Russell, Littleton Englewood Wastewater Treatment Plant	**The Importance of Professionally Training Citizen Monitors in Building, Promoting and Implementing a State-Wide Bioassessment Program in California**, James Harrington, CA Dept. of Fish and Game	**Pacific Northwest side-by-side protocol comparison test**, Steve Lanigan, USFS/ BLM	
8:45 - 9:05	**Monitoring networks in Alabama**, Fred Leslie, AL Dept. of Environmental Management	**Compiling a baseline water quality database from heterogeneous data sources: lessons learned**, Nenad Iricanin, South FL Water Management District	**MARINe: A Long-term Monitoring Program for Detecting Change in Rocky Intertidal Environments**, Steve Murray, California State University, Fullerton	**Preliminary Findings of Anthropogenic Organic Compounds in Source and Finished Waters of Community Water Systems**, Gregory Delzer, USGS	**An evaluation of aquatic communities in urbanized Mediterranean climate streams: a guide to more effective stream restoration techniques in the Santa Clara Basin**, San Jose, California, Alison Purcell, University of CA, Berkeley	**Evaluation of Volunteer-based Water Quality Monitoring Training for SCORE (South Carolina Oyster Restoration and Enhancement)**, Steven O'Shields, I.M. Systems Group, Inc.	**National Wadeable Stream Survey Comparability Study**, Mark Southerland, Versar, Inc.	
9:05 - 9:25	**Open discussion** facilitated by Gail Mallard, USGS	**Data Comparability and Modernization of Environment Canada's Water Quality Information Holdings**, Chris Lochner, Environment Canada, National Water Research Institute	**The Value of Communication, Collaboration and Coordination for Statewide Decision Making: The Example of the Beach Water Quality Workgroup**, Robin McGraw, CA State Water Resources Control Board	**Are environmental contaminant concentrations in U.S. waters harmful to fish-eating wildlife?**, Jo Ellen Hinck, USGS Columbia Environmental Research Center	**Physical, chemical, and biological characteristics of streams in urbanizing areas near Denver, Colorado**, Lori Sprague, USGS	**A Participatory, Multi-Stakeholder Approach to Curbing Urban Sprawl**, Andrew Kett, Citizens' Environment Watch	**Determining the Comparability of Six Bioassessment Methodologies in New England**, Rebecca Weidman, New England Interstate Water Pollution Control Commission	
9:30 - 10:00	Break - Refreshments in Exhibit Hall 1							

Wednesday, May 10

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session I **10:00–11:30**	***Real-Time Monitoring II: Safeguarding Drinking Water & Public Health*** Moderator: Peter Tennant	***Collaborating for Improved Monitoring I*** Moderator: Toni Johnson	***Cooperative Regional Monitoring in California—Lessons Learned*** Moderator: Val Connor	***Evaluating Key Stressors to the Nation's Aquatic Resources*** Moderator: Katherine Alben	***Approaches to National Water Quality Monitoring & Assessment in Other Countries*** Moderator: Chuck Spooner	***Volunteer Monitoring: Raising the Bar*** Moderator: Jacob Apodaca	***Characterizing & Interpreting Habitat Data*** Moderator: Dan Sullivan	WORKSHOP: ***Statistical Analysis of Probability Survey Data Using R Statistical Software, Part 2*** Facilitator: Tony Olsen, USEPA
10:05 - 10:25	**BacteriALERT: A Cooperative Program for Water-quality Monitoring and Prediction of Escherichia coli Bacteria in the Chattahoochee River, Georgia**, Stephen Lawrence, USGS	**Monitoring Environmental Stressors and Evaluating the Existing and Potential Designated Uses of Hardies Creek, Galesville, Wisconsin**, Daniel Helsel, WI Dept. of Natural Resources	**Cooperative Agricultural Monitoring on California's Central Coast: An Integrated, Innovative Approach**, Karen Worcester, Central Coast Water Board	**Monitoring Implications of the Updated Ambient Water Quality Criteria for Copper and the Copper Biotic Ligand Model (BLM)**, Lauren Wisniewski, USEPA	**Europe-wide monitoring obligations under the EU Water Framework Directive**, Jos G. Timmerman, Institute for Inland Water Management and Waste Water Treatment (RIZA)	**Stream Waders and the Maryland Biological Stream Survey: Comparing Volunteer and Professional Stream Quality Data**, Chris Millard, MD Dept. of Natural Resources	**Watershed Stewardship Utilizing GPS Habitat and Bioassessment Surveys**, Aspen Madrone, Contra Costa County	
10:25 - 10:45	**AquaSentinel: An Advanced Real-Time Biosensor System for Source Water Protection**, Elias Greenbaum, Oak Ridge National Laboratory	**Water Quality Indicators and Monitoring Design to Support the Albemarle-Pamlico National Estuary Program: A Progress Report**, Dean Carpenter, Albemarle-Pamlico National Estuary Program	**A Regional Approach to Research/Monitoring in Southern California**, Chris Crompton, Orange County, California	**Characterizing and Interpreting Physical Habitat in the National Wadeable Stream Assessment**, Philip Kaufmann, USEPA	**Designing a National Water Quality Monitoring Network to support the Canadian Freshwater Quality Indicator**, Rob Kent, Environment Canada	**Evaluation of Volunteer Data—The Lakes of Missouri Volunteer Program Review**, Daniel Obrecht, University of Missouri, Lakes of Missouri Volunteer Program	**Great Lakes Aquatic Gap: A Regional Approach to Identifying Gaps in Species and Habitat Conservation for Great Lake Streams**, Jana Stewart, USGS	
10:45 - 11:05	**Variability in Responses of Multi-Parameter Sensors in a Prototype Real-Time Early Warning System to Monitor Water Quality**, Eric Vowinkel, USGS	**Development of a Collaborative Multi-Jurisdictional Stream-Monitoring Network to Support Restoration of the Chesapeake Bay**, Stephen Preston, USGS Chesapeake Bay Program Office	**Southern California Laboratory Intercalibration Exercises: A Demonstration Regarding the Comparability of Monitoring Programs Using Multiple Laboratories**, Rich Gossett, CRG Marine Laboratories, Inc.	**Nutrient and Acidity Status of Wadeable Streams in the Contiguous United States - Results from EPA's Wadeable Streams Assessment**, Ellen Tarquinio, USEPA	**Biological Assessment of Water Quality: Delivery of a National System in Australia**, Richard Norris, University of Canberra	**Volunteer Water Quality Monitoring Data Enhancing Lake Chatuge Watershed Study**, Callie Dobson, Hiwassee River Watershed Coalition, Inc.	**An Overview of the National Park Service's Vital Signs Water Quality Monitoring Program: A National Framework for Land Management Agencies**, Gary Rosenlieb, National Park Service	
11:05 - 11:25	**Real Time Monitoring—The Installation and Continuous Operation of Organic Carbon and Liquid Chromatography Analyzers at Remote Field Stations in the Sacramento-San Joaquin Delta**, David Gonzalez, CA Dept. of Water Resources	**Water Quality Monitoring Among Local Agencies in the Red River of the North Basin**, Robert Hearne, North Dakota State University	**Information management in a multi-agency cooperative monitoring program**, Larry Cooper, Southern California Coastal Water Research Project	**Evaluating the extent and relative risk of aquatic stressors in wadeable streams throughout the U.S.A.**, John Van Sickle, USEPA NHEERL	**Water monitoring and utilization: surveillance, struggle or symbol?**, Dennis Kool, Erasmus University Rotterdam (Centre for Public Governance)	**QA/QC Assessment of Volunteer Monitoring in Rhode Island**, Elizabeth Herron, URI Cooperative Extension	**Moving the National Water-Quality Assessment habitat data through time**, Jeffrey Steuer, USGS	
11:30 - 1:00	Lunch in Exhibit Hall 1							

Wednesday, May 10

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session J **1:00–2:30**	***The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries*** Session Topic: Great Lakes Monitoring Networks	***Collaborating for Improved Monitoring II*** Moderator: Gayle Rominger	***Assessing Ground Water Vulnerability Through Statistical Methods I*** Moderator: Tom Nolan	***Challenges in the Development of Nutrient Criteria for Streams & Rivers I*** Moderator: Jeff Frey	***Mercury Contamination: Sources, Transport, & Fate I*** Moderator: Mark Brigham	***National Wadeable Streams Assessment: State Experiences*** Moderator: Leslie McGeorge	***New Technologies & Approaches*** Moderator: Bob Carlson	SHORT COURSE: ***Data Management and Databases: Capturing, Storing, and Managing Data for Success in Monitoring*** Trainers: Kristine Stepenuck, University of Wisconsin Extension and Wisconsin Department of Natural Resources; Lynette Seigley, Iowa Department of Natural Resources; Revital Katznelson, California State Water Resources Control Board
1:05 - 1:25	**The Great Lakes National Program's Multi-Media Monitoring Program**, Paul Horvatin, Great Lakes National Program Office	**Collaborative Monitoring in the Great Lakes: Revisiting the Lake Michigan Mass Balance Project**, John Hummer, Great Lakes Commission	**Regression model for national assessment of nitrate in ground water**, Bernard Nolan, USGS	**Overview of the National Nutrient Criteria Program**, Amy Parker, USEPA	**Statewide Monitoring of Mercury in Surface Water, Precipitation, and Fish in Indiana**, Martin Risch, USGS	**Texas' Contributions to the National Wadeable Streams Assessment and Future Direction of the State's Biological Monitoring Program**, Anne Rogers, TX Commission on Environmental Quality	**The SWAMP Advisor—a New Tool for Producing Consistent and Comprehensive Quality Assurance Project Plans (QAPPs)**, Lawrence Keith, Instant Reference Sources, Inc.	
1:25 - 1:45	**National Monitoring Network Design for the Great Lakes**, Jack Kelly, USEPA National Health and Environmental Effects Research Laboratory	**Collaboration on EMAP Stream Condition Assessments in EPA Region 8**, Thomas Johnson, USEPA Region 8	**Using Logistic Regression to Assess Regional Ground-Water Vulnerability: High Plains Aquifer**, Jason Gurdak, USGS Colorado Water Science Center	**Nutrient-Biota Interactions in Agriculturally Dominated Landscapes: Lessons from the U.S. Geological Survey National Water-Quality Assessment (NAWQA) Program**, Mark Munn, USGS	**Mercury monitoring in California sport fish: Past, present, and future**, Jay Davis, San Francisco Estuary Institute	**Validation of a Multimetric Index Using Probabilistic Monitoring Data**, Jason Hill, VA Dept. of Environmental Quality	**Continuous nitrate concentration data from a small agricultural ditch in Indiana: Relationship to streamflow and inferences to biological processes affecting nitrogen cycling**, Timothy Lathrop, USGS	
1:45 - 2:05	Presenter TBD	**A Collaborative Approach to Assessing Watershed Conditions in Coastal National Parks**, Kristen Keteles, National Park Service	**Empirical modeling of nitrate loading and crop yield for corn-soybean rotations in Iowa**, Robert Malone, USDA ARS	**Response of benthic algal and invertebrate communities to nutrient enrichment in agricultural streams: Implications for establishing nutrient criteria**, Robert Black, USGS	**Mercury in northeastern North America: A synthesis of existing databases**, David Evers, BioDiversity Research Institute	**A comparison of biological methods for macroinvertebrate collection in Missouri streams**, Shane Dunnaway, MO Dept. of Conservation	**Use of Trace-Level Cyanide Method to Determine Attenuation of Discharged Cyanide in Lower South San Francisco Bay**, Peter Schafer, City of San Jose, CA	
2:05 - 2:25	**Open discussion** facilitated by Chuck Spooner, USEPA	**A Multi-scale Collaborative Approach For Linking Terrestrial and Aquatic Long-Term Monitoring: Lessons Learned in the Delaware River Basin and Proposed New Directions**, Peter Murdoch, USGS	**Using logistic regression to predict the probability of occurrence of volatile organic compounds in ground water**, Michael Moran, USGS	**The Use of Calculated Stream Metabolism in Understanding Nutrients in Agricultural Streams**, Jill Frankforter, USGS	**A Framework for Monitoring the Response to Changing Mercury Releases**, Michael Murray, National Wildlife Federation	**Comparability of Habitat and Macroinvertebrate Collection Methods in Oklahoma's Low Gradient Streams**, Monty Porter, OK Water Resources Board	**Identifying Greener Analytical Methods in NEMI for More Environmentally Friendly Monitoring**, Jennifer Young, ACS Green Chemistry Institute	
2:30 - 3:30	Quick Break (refreshments in Exhibit Hall 1) followed by Poster & Exhibit viewing							

Wednesday, May 10

	Meeting Room A1	Meeting Room A2	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room A7	Meeting Room C3
Concurrent Session K **3:30–5:00**	***Bits & Bytes in Cyberspace: Sharing Data Via the Internet*** Moderator: Linda Green	***State & Tribal Monitoring Approaches*** Moderator: Paul Currier	***Assessing Ground Water Vulnerability Through Statistical Methods II*** Moderator: Tom Nolan	***Challenges in the Development of Nutrient Criteria for Streams & Rivers II*** Moderator: Mark Munn	***Mercury Contamination: Sources, Transport, & Fate II*** Moderator: Jay Davis	***Volunteer Monitoring Databases*** Moderator: Kristine Stepenuck	***Predictive Bioassessment Models*** Moderator: Gretchen Hayslip	SHORT COURSE: ***Developing Habitat Condition Metrics*** Trainer: Phil Kaufmann, USEPA
3:35 - 3:55	**ACWA (Alaska Clean Water Action) Program and Web-based Tool for Managing Alaska's Waters**, Dianne Denson, State of Alaska	**Oklahoma's Beneficial Use Monitoring Program (BUMP) , Results, Lessons Learned, and Future Directions**, Julie Chambers, OK Water Resources Board	**Screening-Level Assessments of Public Water Supply Well Vulnerability to Natural Contaminants**, Stephen Hinkle, USGS	**Addressing California's Nutrient Issues**, Dena McCann, CA State Water Resources Control Board	**Mercury cycling and bioaccumulation in streams in Oregon, Wisconsin, and Florida**, Mark Brigham, USGS	**Development of an Internet Database for WV Save Our Streams Volunteer Monitors**, Timothy Craddock, WV Save Our Streams Program	**Assessing the biological quality of the Nation's streams with an indicator of taxonomic completeness**, Charles Hawkins, Utah State University	
3:55 - 4:15	**Integrating Historical and Real-Time Monitoring Data into an Internet-Based Watershed Information System for the Bear River Basin**, David Stevens, Utah State University	**Lock 'um in a Room, Hawaii's attempt to achieve comparability**, Linda Koch, Hawaii State Department of Health	**Probability of Detecting Atrazine/Desethylatrazine and Elevated Concentrations of Nitrate in Ground Water in Colorado**, Michael Rupert, USGS	**Algal Metric Approaches for Assessing Trophic Condition and Organic Enrichment in U.S. Streams and Rivers**, Stephen Porter, USGS	**EMMMA: A Web-based System for Environmental Mercury Mapping, Modeling, and Analysis**, Stephen Wente, USGS	**Westchester County Citizens' Volunteer Monitoring Program**, Susan Darling, Westchester County Department of Planning	**Comparability of Biological Assessments Derived from National-, Regional-, State-, and Provincial-Scale Predictive Models**, Peter Ode, CA Dept. of Fish and Game	
4:15 - 4:35	**Web-based Data Sharing for Small Watersheds**, Lisa Walling, Palo Alto Regional Water Quality Control Plant	**Data-Driven Decision-making: Enhanced use of Data Quality Objectives in New Hampshire's Comprehensive Water Monitoring Strategy**, Paul Currier, State of New Hampshire	**Development and Application of a regression model for estimating the occurrence of Altrazine in shallow ground water beneath agricultural areas of the United States**, Paul Stackelberg, USGS	**Impacts of Nutrients on the Biological Integrity of Wadeable Streams in Wisconsin**, Dale Robertson, USGS	**Reconnaissance survey of mercury in water, sediment, and fish from U.S. streams**, Barbara Scudder, USGS	**Open Source Citizen Volunteer Water Monitoring Database**, Andrew Alm, Environmental Alliance for Senior Involvement	**Using biomonitoring data to assess possible causes of biological impairment: Combining predictive models and taxon tolerance values**, Daren Carlisle, USGS	
4:35 - 4:55	**Displaying Water Quality Data on Internet Maps**, Sandy Williamson, USGS	**Navajo Nation EPA Water Quality Sampling Activities**, Eric Rich, Navajo Nation EPA	**Development of Spatial Probability Models to Estimate Ground-Water Vulnerability to Nitrate Contamination in the Mid-Atlantic Region**, Earl Greene, USGS	**Control of nitrogen cycling processes in the Upper Mississippi River (UMR)**, William Richardson, USGS Biological Resources Division	**Modeling Mercury in Stream Ecosystems**, Robert Ambrose, USEPA	**In-stream Monitoring Database**, Gretchen Peterson, PetersonGIS	**Biological Assessment of Water Quality: Delivery of a National System in Australia**, Richard Norris, University of Canberra	
6:00 - 9:00	**Evening Reception at The Tech Museum of Innovation (http://www.thetech.org/)** The Tech Museum of Innovation is located across the street from the Convention Center at 201 South Market Street. The Tech is a hands-on technology and science museum for people of all ages and backgrounds. Gallery themes include innovation, the internet, the human body, and exploration. Tickets for this reception must have been purchased during pre-conference registration.							

Thursday, May 11

7:00 - 8:00	Breakfast in Ballrooms A1, 2, 7, 8							
7:30 - 12:00	Exhibitor Break-Down (Exhibit Hall 1)							
	Meeting Room A3	**Meeting Room A4**	**Meeting Room A5**	**Meeting Room A6**	**Meeting Room C2**	**Meeting Room C4**	**Meeting Room C3**	**Meeting Room C1**
Concurrent Session L **8:00–9:30**	***Monitoring Across National Borders*** Moderator: James Stribling	***Monitoring for Compounds of Emerging Concern I*** Moderator: Akin Babatola	***Integrating Monitoring & Prediction: The Quality of the Nation's Streams I*** Moderator: Dave Wolock	***Evaluation of Trends in Ground Water Quality: Lessons Learned from Local to National-Scale Studies*** Moderator: Mary Ambrose	***Mercury Contamination: Sources, Transport, & Fate III*** Moderator: Don Dycus	***Volunteer Monitoring Gets Results*** Moderator: Danielle Donkersloot	***Determinants & Indicators of Stress in Aquatic Systems*** Moderator: Jerry Diamond	SHORT COURSE: ***Developing O/E (Observed-to-Expected) Models for Assessing Biological Condition*** Trainer: Chuck Hawkins, Utah State University
8:05 - 8:25	**Monitoring of transboundary waters in Europe: lessons learnt from the UNECE pilot projects**, John Chilton, British Geological Survey	**Occurrence of Anthropogenic Organic Compounds in Ground Water and Finished Water of Community Water Systems**, Jessica Hopple, USGS	**SPARROW: A Hybrid Statistical-Deterministic Approach to Modeling Surface-Water Quality**, Richard Smith, USGS	**Evaluation of Ground-Water-Quality Trends Design as Part of the USGS National Water Quality Assessment Program**, Michael Rosen, USGS	**Wet Deposition of Mercury In The U.S. and Canada, 1996-2004: Results from the NADP Mercury Deposition Network**, David Gay, Illinois State Water Survey	**Connection before Protection**, Cheryl Cheadle, OK Conservation Commission	**Integrated indicators of contaminant response in resident species: making a new generation of indicators feasible for management**, Susan Anderson, University of California, Davis	
8:25 - 8:45	**Global Water Watch, a Worldwide Network of Community-Based Water Monitoring Groups**, William Deutsch, Auburn University	**Monitoring Synthetic Musk compounds in Municipal Wastewater and Estimating Biota Exposure in the Receiving Waters**, Lantis Osemwengie, USEPA	**New England Sparrow Model and Example Applications of Model Results**, Richard Moore, USGS	**Trends in Pesticide Detections and Concentrations in Ground Water of the United States, 1993-2003**, Laura Bexfield, USGS	**Mercury concentrations in stream fish throughout 12 western states in the USA**, Alan Herlihy, Oregon State University	**How to get the Public Active in Water Quality Issues**, Ginger North, DE Nature Society	**Using simulation to evaluate the comparability of different bioassessment methods**, Yong Cao, Utah State University	
8:45 - 9:05	**Improving Binational Coordination of Monitoring in the Great Lakes**, Melanie Neilson, Environment Canada	**Chemical markers of human waste contamination in source waters: A simplified analytical approach**, Tammy Jones-Lepp, USEPA	**Regional scale point-source nutrient load estimation in support of SPARROW nutrient modeling**, Gerard McMahon, USGS	**Trends in shallow ground-water quality of the Delmarva Peninsula, Delaware, Maryland, and Virginia: Results from local-scale and regional study**, Linda Debrewer, USGS	**The roles of biogeochemistry and aquatic biota in mercury cycling in stream ecosystems**, Lia Chasar, USGS, Florida A&M University	**Breaking the Code: Training Volunteers to Convert Data to Information**, Candie Wilderman, ALLARM	**Quantifying tolerance indicator values for common stream fish species of the United States**, Michael Meador, USGS	
9:05 - 9:25	**The JA JAN Coalition a Binational Collaborative Network for Water Quality Monitoring in the U.S.-Mexico Border Region**, Hiram Sarabia-Ramirez, San Diego Baykeeper	**Occurrence of Radium-224, Radium-226, and Radium-228 in Aquifers Used Primarily for Drinking Water in the United States: Retrospective Survey of Results from 1987 to 2004**, Jeffrey Fischer, USGS	**Effect of Stream-Network Resolution on the Calibration of a Nutrient SPARROW Model for the Southeastern United States**, Anne Hoos, USGS	**Ground-water quality trends of the South Platte River alluvial aquifer, Colorado**, Suzanne Paschke, USGS	**Mercury in ground water. soils, and septage**, New Jersey Coastal Plain, Julia Barringer, USGS	**Data Tell Part of the Story, Actions Write the Rest**, Brian Soenen, IA Dept. of Natural Resources	**Relation between urbanization and relative toxicity of semipermeable membrane device extracts from the Lake Tahoe Basin and Truckee River watershed, Nevada and California, 2002-2004**, Timothy Rowe, USGS NV Water Science Center	
9:30 - 10:00	Break in Ballrooms A1, 2, 7, 8							

Thursday, May 11

	Meeting Room A3	Meeting Room A4	Meeting Room A5	Meeting Room A6	Meeting Room C2	Meeting Room C4	Meeting Room C3	Meeting Room C1
Concurrent Session M **10:00–11:30**	***Conveying Results: Translating Data into Understanding*** Moderator: Jessica Franks	***Monitoring for Compounds of Emerging Concern II*** Moderator: Akin Babatola	***Integrating Monitoring & Prediction: The Quality of the Nation's Streams II*** Moderator: Dave Wolock	***Bacteria Monitoring: From Source to Sea*** Moderator: Chris Coburn	***Mercury TMDLs: Lessons Learned from Local & Regional Studies*** Moderator: Ruth Chemerys	***Program Evaluation & Evolution*** Moderator: Ross Clark	***Taxonomic Data Quality, Comparability, & Performance*** Moderator: Andy Rehn	WORKSHOP: ***Wetlands Bioassessment*** Facilitators: Chris Faulkner, USEPA; John Mack, Ohio EPA
10:05 - 10:25	**A graphical presentation of water quality data in time and space**, Peter Stoks, Association of Rhine Water Works RIWA	**Monitoring perchlorate in shallow ground water in the Central United States**, Stephen Kalkhoff, USGS	**Biologically based urban response models for the South Atlantic gulf and Tennessee River basins**, Thomas Cuffney, USGS	**Skokomish River Fecal Coliform TMDL Attainment Monitoring in Washington State**, George Onwumere, Washington State Department of Ecology	**The Sacramento San Joaquin River Delta Mercury TMDL: Reducing Methylmercury in Fish and Water**, Michelle Wood, CA Regional Water Quality Control Board, Central Valley Region	**Water Quality Monitoring in Michigan, 1996-2006: A Decade of Program Evolution**, Gary Kohlhepp, MI Dept. of Environmental Quality	**Effect of taxonomic resolution on the performance characteristics of a new macroinvertebrate field sampling protocol for large rivers**, Karen Blocksom, USEPA	
10:25 - 10:45	**Designing a National Water Quality Monitoring Network to support the Canadian Freshwater Quality Indicator**, Rob Kent, Environment Canada, National Water Research Institute	**Perchlorate Monitoring in Llagas Groundwater Subbasin**, Michael Taraszki, MACTEC Engineering and Consulting, Inc.	**Estimating pesticide concentrations in U.S. streams from watershed characteristics and pesticide properties**, Charles Crawford, USGS	**Volunteer/State Partnerships Inspire Grassroots Action**, Cheryl Snyder, PA Dept. of Environmental Protection	**Guadalupe River Watershed Mercury TMDL**, Carrie Austin, SFBay Water Board	**A cooperative State and USGS statewide water quality monitoring network: accomplishments and lessons learned after 15 years**, Christopher Mebane, USGS	**A national autecology list for benthic macroinvertebrates**, Erik Leppo, Tetra Tech, Inc.	
10:45 - 11:05	**Watershed Assessment: A Template for Assessing Water Quality Conditions at Watershed Level**, Anitra Pawley, University of California, Davis	**Occurrence of Anthropogenic Organic Compounds in Surface Water and Finished Water of Community Water Systems**, James Kingsbury, USGS	**Regression models for explaining and predicting concentrations of organochlorine pesticides in whole fish from U.S. streams**, Lisa Nowell, USGS	**Volunteer Monitoring for Bacteria in San Francisco Bay Area Creeks**, Amy Wagner, USEPA	**Use of multi-media monitoring to develop a statewide mercury TMDL**, Bruce Monson, MN Pollution Control Agency	**Can you teach a long-term benthic monitoring program new tricks? Assessment and redesign to address different scales**, Marc Vayssières, CA Dept. of Water Resources	**Enhancing the Credibility of Taxonomic Data: the National Wadeable Streams Assessment**, James Stribling, Tetra Tech, Inc.	
11:05 - 11:25	**LakeSuperiorStreams.org: Making stormwater and stream data come alive for citizens, students, teachers, contractors, resource agencies, decision-makers and scientists**, Richard Axler, University of Minnesota - Duluth	**Concentrations of organic compounds in wastewater at five sites in New York State, 2003-04**, Patrick Phillips, USGS	**Use of WARP to Design a Monitoring Program to Identify Waters Potentially at Risk from Pesticides**, Nelson Thurman, USEPA	**Surfrider Foundation's Blue Water Task Force Program - Volunteer Monitoring that Leads to Change**, Rick Wilson, Surfrider Foundation	**Mercury Emission Trends and Biota Response in Florida: Case Study**, Thomas Atkeson, FL Dept. of Environmental Protection	**Optimization of a Large-scale Water Quality Monitoring Network in South Florida**, Patricia Burke, South FL Water Management District	**How often are we wrong? A Bayesian assessment of taxonomic identifications for the National Wadeable Streams Assessment**, Lester Yuan, USEPA	

Thursday, May 11

11:30 - 1:15	**Closing Plenary Luncheon (Ballrooms A1, 2, 7, 8)** Introduction to Closing Plenary, Charles Spooner, NWQMC Co-Chair **Keynote Speaker - The National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries, Dr. Robert Hirsch, Chair, Subcommittee on Water Quality and Availability** **Keynote Speaker - The Importance of a National Framework, Ms. Julie Packard, Executive Director, Monterey Bay Aquarium** Conference Closing, David Tucker, Conference Chair
1:30 - 3:30	Exhibitor Demonstrations at Guadalupe River Park & Gardens (Meet in Ballroom Concourse; participants will walk to demo site)
1:30 - 4:30	**From Paper to Action: Implementing State Water Monitoring Strategies -- State/EPA Meeting (Meeting Room A3)** In this interactive forum, State water quality managers and staff are invited to identify common challenges and share practical solutions to implementing their water quality monitoring strategies.
1:30 - 5:00	**USGS NAWQA Program Meetings (Meeting Rooms TBA)**
1:30 - 5:00	Field Trip: Wetlands Bioassessment (Part 2 of Workshop) (Meet at main entrance to Convention Center on 1st floor)
1:30 - 5:00	Field Trip: Salt Pond Restoration Tour (Meet at main entrance to Convention Center on 1st floor)